

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3937
CALIBRATION DATE: 14-Dec-07

SBE 37 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.017840e+000
h = 1.432398e-001
i = -9.624116e-005
j = 2.937048e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 8.0028e-006

BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (Hz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
22.0000	0.0000	0.00000	2665.89	0.00000	0.00000
1.0000	34.7339	2.96959	5270.44	2.96960	0.00001
4.4999	34.7144	3.27605	5468.33	3.27605	-0.00000
15.0000	34.6712	4.25569	6056.93	4.25568	-0.00001
18.4999	34.6617	4.60006	6250.38	4.60003	-0.00002
24.0000	34.6504	5.15667	6550.73	5.15669	0.00003
28.9999	34.6427	5.67707	6819.22	5.67709	0.00002
32.5000	34.6381	6.04842	7004.31	6.04840	-0.00002

$f = \text{INST FREQ} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$

Conductivity = $(g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p)$ Siemens/meter

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

